

FEA
EMU FAILURE MODE, EFFECT ANALYSIS

Page: 9
Date: 04/10/90

01/02/90 SUPERSEDES / /				ANALYST:						
NAME	P/M	FUNCTION	FAILURE MODE & CAUSES	MISSION PHASE	FAILURE EFFECT	FAILURE DETECTION FLIGHT/GROUND	TIME TO EFFECT/ ACTIONS	CRIT	REMARKS/HAZARD	REF
PRIMARY OXYGEN PRESSURE SENSOR, ITEM #12		Ensures the primary O2 bottle pressure. Pressure sensor range is 0-1100 psia.	112FM02; Excessive output (full scale).	PREP/EVA	EMI ITEM: Sensor output voltage will indicate a full scale pressure (1100 psia). CAUSES: Open (electrical) in the resistive element electrical lead or connector on the ground lead.	FLIGHT: Tes. CMS will tell crewman when SOP comes "O2" or can be detected during periodic status checks "O2 P 1100" and a E oxygen left. GSE INTERFACE: False indication of high tank pressure and low O2 consumption rate.	None. TIME greater than 10s.	3/1F A-PASS B-PASS C-PASS N/A	Redundant item for None. Mission success is the oxygen supply. For mission success RIDS will allow ground personnel to monitor sensor data and alert crewman of failure.	
SV770526-1, SV770526-2 (1)				EVA	MISSION: None for single failure. Terminate EVA when periodic status check reveals high primary O2 pressure and over 1000 O2 left. Failure of primary O2 supply would not result in loss of crew or vehicle.	GROUNDS: Tes. IBMU-E-001, Para. 7.3.3.2.1.1.19, Transducer and ODN Gage Calibration Check.	TIME REQUIRED: N/A			
					CREW/VEHICLE: Possible loss of crewman with loss of SOP.					

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ATTACHMENT -
PAGE 3 OF 30

SEM1-43-C
PAGE 402